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Torgny Palenius

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EXAMINER

DONADO, FRANK E

ART UNIT

PAPER NUMBER

4173

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/553,082	Applicant(s) PALENIUS ET AL.	
	Examiner FRANK DONADO	Art Unit 4173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/11/05</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 33

Claim 33 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention in claim 33 is directed to the judicial exception to 35 U.S.C. 101 of an abstract idea (a computer program) and is not directed to a practical application of such judicial exception (e.g., because the claim does not require any physical transformation and the invention as claimed does not produce a useful, concrete, and tangible result).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 7-11, 13-17, 23-28 and 30-35 are rejected under 35 U.S.C. 102(b) as being anticipated by Nevo, et al (WO 00/04729). From here on, Nevo, et al, shall be referred to as Nevo.

Regarding claim 1, Nevo teaches a method for synchronizing measurements in a mobile communication apparatus [A mobile station is in communication with a base station of a 1st type (TDMA) and a 2nd type (CDMA) and a synchronization occurs between both types of base stations, pg. 4, lines 30-33 and pg. 5, lines 1-2] having a first active radio access means adapted to communicate according to a first radio access technology (RAT) [The mobile station communicates with an active CDMA before handover takes place, pg. 4, lines 30-32] and a second passive radio access means adapted to communicate according to a second RAT [The mobile station communicates with an active CDMA before handover to the passive TDMA takes place, pg. 4, lines 30-32] , comprising generation of a time reference common to the first and second radio access means [The time of day (Nevo's time reference) is acquired from a 1st base station in order to synchronize with a 2nd base station, pg. 4, lines 32-33 and pg. 5, lines 1-2], obtaining at least one time schedule where time schedule indicates a time gap during which the second radio access means is allowed to be active and determines an activation time of the time schedule based on the common time reference [The applicant defines the time schedule as the time gap, which is an interrupt, during which the second radio access means is allowed to be active. Nevo teaches transmission of the 1st base station may be interrupted while it synchronizes to the 2nd base station, pg. 4, lines 23-29].

Regarding claim 2, Nevo teaches the method according to claim 1, wherein when activation of the time schedule is requested [The applicant defines the time

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schedule as the time gap, which is an interrupt. Nevo teaches a scheduled time of 20 ms during which a 1st base station is interrupted to allow time for synchronization over to the 2nd base station, pg. 4, lines 23-29], the request initiates a common time event (CTE) [The interrupt is the common time event, and transmission of a 1st base station may be interrupted while synchronization occurs with the 2nd base station, pg. 4, lines 23-29], in response to which the time reference is generated in the first and the second radio access means [Time of day (Nevo's time reference) information is acquired by one of the base stations in order for synchronization to occur between base stations, pg. 4, lines 32-33 and pg. 5, lines 1-2].

Regarding claim 3, Nevo teaches the method according to claim 2, wherein the CTE is hardware supported interrupt [A signal of a 1st base station is interrupted in order for synchronization to occur between the 1st and second base station, pg. 4, lines 23-29].

Regarding claim 7, Nevo teaches the method according to claim 1, wherein the time schedule is obtained based on information received from a first communication network to which the first radio access means is coupled [The applicant defines the time schedule as an interrupt. A time schedule is obtained from the 1st base station, which is an interrupt. The 1st base station communicates with the Mobile Station and determines that handover is to take place, pg. 4, lines 18-20].

Regarding claim 8, Nevo teaches the method according to claim 7, wherein the received information comprises configuration data specifying gaps in which the second radio access means is allowed to be active [A time gap of 20 ms is defined to be the interruption time during which handover should occur, pg. 4, lines 23-25].

Regarding claim 9, Nevo teaches the method according to claim 7, wherein the received information comprises setup or reconfiguration information, and the first radio access means obtains the gaps based on stored and received data [The current or 1st base station receives information from the new or 2nd base station through the Mobile Station that allows synchronization to take place, pg. 3, lines 13-19 and this handover includes a time gap during which transmission of 1st base station is interrupted, pg. 4, lines 19-23].

Regarding claim 10, Nevo teaches the method according to claim 1, wherein the duration of a time gap and the distance between the common time reference and a time gap are given in the time schedule [Nevo teaches defining a time gap duration of 20 ms, pg. 4, lines 23-25].

Regarding claim 11, Nevo teaches the limitations of claim 1, wherein several time gaps being are determined in the time schedule and the distance between each of the time gaps being specified in the time schedule [The distance between the time gaps is defined according to the IS95 standard and is about 20 ms long, pg. 4, lines 23-25].

Regarding claim 13, Nevo teaches the method according to claim 1, wherein the time schedule obtained by the first radio access means is determined in the time format of a first RAT [The mobile station of both the 1st and 2nd type are synchronized to its corresponding clock signal in order for handover to take place, pg. 4, lines 12-17].

Regarding claim 14, Nevo teaches the method according to claim 13, wherein the time schedule is translated into the time format of a second RAT by the second radio access means [The mobile station of the 2nd type is synchronized to its corresponding clock signal in order for handover to take place, pg. 4, lines 12-17].

Regarding claim 15, Nevo teaches the method according to claim 1, wherein the time schedule is utilized by the second radio access means to provide cell measurements [The mobile station is handed over from the 1st base station to the 2nd base station in response to the data from the 2nd mobile station and the 2nd mobile station subsequently takes cell measurements, pg. 6, lines 1-4. The data received includes a time scheduled for the 1st mobile station to be interrupted, pg. 4, lines 18-25].

Regarding Claim 16, Nevo teaches an arrangement for synchronizing measurements in a mobile communication apparatus [A mobile station is in communication with a base station of a 1st type (TDMA) and a 2nd type (CDMA) and a synchronization occurs between both types of base stations, pg. 4, lines 30-33 and pg. 5, lines 1-2], comprising a first active radio access means [The mobile station

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communicates with an active CDMA before handover takes place, pg. 4, lines 30-32], a first transceiver means [Mobile Station's have a single transceiver for TDMA and CDMA use, pg. 5, lines 13 through 18] for communicating with a first communication network, the first transceiver means being adapted to communicate according to a first radio access technology [The mobile station communicates with an active CDMA before handover takes place, pg. 4, lines 30-32], a second passive radio access means [The mobile station communicates with an active CDMA before handover to the passive TDMA takes place, pg. 4, lines 30-32] comprising a second transceiver means with a second communication network, the second transceiver means being adapted to communicate according to a second radio access technology [A Mobile Station comprises mobile equipment that can include 2 transceivers, one configured for TDMA operation and one for CDMA, pg. 18, lines 28-31]. Nevo also teaches this arrangement further comprising a time reference generating means for generating a time reference common to the first and the second radio access means [The time of day (Nevo's time reference) is acquired from the TDMA base station in order to synchronize with the CDMA station, pg. 4, lines 32-33 and pg. 5, lines 1-2]. Nevo also teaches a time schedule generating means for obtaining at least one time schedule, time schedule indicating at least one time gap, during which the second radio access means is allowed to be active and the time schedule generating means being adapted to determine the activation time of the schedule based on the common time reference [The applicant defines the time schedule as the time gap, which is an interrupt, during which the second radio access means is allowed to be active. Nevo teaches transmission of the

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1st base station may be interrupted while it synchronizes to the 2nd base station, pg. 4, lines 23-29].

Regarding claim 17, Nevo teaches the arrangement according to claim 16, wherein the time reference generating means is adapted to generate a common time event (CTE) [The interrupt is the common time event, and transmission of a 1st base station may be interrupted while synchronization occurs with the 2nd base station, pg. 4, lines 23-29] and the time reference in response to the CTE in the first and the second radio access means [Time of day (Nevo's time reference) information is acquired by one of the base stations in order for synchronization to occur between base stations, pg. 4, lines 32-33 and pg. 5, lines 1-2].

Regarding Claim 23, Nevo teaches the arrangement according to claim 16, wherein the time schedule generating means is adapted to obtain the time schedule based on stored information and data received from the first communication network during operation [The applicant defines the time schedule as an interrupt. A time schedule is obtained from the 1st base station, which is an interrupt. The 1st base station communicates with the Mobile Station and determines that handover is to take place, pg. 4, lines 18-20].

Regarding claim 24, Nevo teaches the arrangement according to claim 16, wherein the time schedule generating means is adapted to incorporate into the time

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schedule parameters that identify the duration of the time gap, and the distance between the common time reference and the at least one time gap [A time gap of 20 ms is defined to be the interruption time during which handover should occur, pg. 4, lines 23-25].

Regarding Claim 25, Nevo teaches the arrangement according to claim 16, wherein the time schedule generating means is adapted to incorporate into the time schedule a plurality of time gaps and to specify the distance between each of the plurality of time gaps in the time schedule [The distance between the time gaps is defined according to the IS95 standard and is about 20 ms long, pg. 4, lines 23-25]

Regarding claim 26, Nevo teaches the arrangement according to claim 16, wherein the time schedule generating means is adapted to determine the time schedule in the time format of the first radio access technology [The mobile station of both the 1st and 2nd type are synchronized to its corresponding clock signal in order for handover to take place, pg. 4, lines 12-17].

Regarding claim 27, Nevo teaches the arrangement according to claim 26, wherein a processor means of the second radio access means is adapted to translate the time schedule into the time format of the second radio access technology [The mobile station of the 2nd type is synchronized to its corresponding clock signal in order for handover to take place, pg. 4, lines 12-17].

Regarding claim 28, Nevo teaches the arrangement according to claim 16, wherein the second radio access means is adapted to provide cell measurements during the time gaps given in the time schedule, and wherein the first access radio means is adapted to be passive [The mobile station is handed over from the 1st base station to the 2nd base station in response to the data from the 2nd mobile station and the 2nd mobile station subsequently takes cell measurements, pg. 6, lines 1-4. The data received includes a time scheduled for the 1st mobile station to be interrupted, pg. 4, lines 18-25].

Regarding claim 30, Nevo teaches the arrangement according to claim 16, wherein the second access technology is GSM (Global System for Mobile communication) [The Mobile Station is in communication with a 2nd radio access technology that is GSM during handover, pg. 4, lines 19-21].

Regarding claim 31, Nevo teaches the arrangement according to claim 16, wherein the first and second radio access means have at least one common radio resource [A duplexer conveys RF signals via antenna to GSM or CDMA base station, pg. 19-21].

Regarding claim 32, Nevo teaches the arrangement according to claim 31, wherein the common radio resource is an antenna [A duplexer conveys RF signals via antenna to GSM or CDMA base station, pg. 19-21].

Regarding claim 33, Nevo teaches the arrangement according to claim 16, further comprising a mobile terminal operable within the first radio access technology and second radio access technology [The mobile station is in communication with 2 types of base stations and switches between TDMA and CDMA, pg. 18, lines 20-23], where the mobile terminal has digital computer capabilities [TDMA and CDMA are produced as digital data, pg. 19, lines 17-18]. Nevo also teaches the arrangement according to claim 16, further comprising obtaining at least one time schedule, the time schedule indicating a time gap during which the second radio access means is allowed to be active [The applicant defines the time schedule as the time gap, which is an interrupt, during which the second radio access means is allowed to be active. Nevo teaches transmission of the 1st base station may be interrupted while it synchronizes to the 2nd base station, pg. 4, lines 23-29]. Nevo also teaches the arrangement according to claim 16, further comprising determination of an activation time of the time schedule based on the common time reference [The applicant defines the time schedule as the time gap, which is an interrupt, during which the second radio access means is allowed to be active. Nevo teaches transmission of the 1st base station may be interrupted while it synchronizes to the 2nd base station, pg. 4, lines 23-29].

Regarding claim 34, Nevo teaches the arrangement according to claim 16, adapted for use in a wireless communication apparatus [Nevo's invention is specific to wireless telecommunications, pg. 1, lines 5-6].

Regarding claim 35, Nevo teaches the arrangement according to claim 34; wherein the wireless communication apparatus is one from the group consisting of a mobile radio terminal, a mobile telephone (1), a pager and a communicator [Nevo's invention is specific to wireless telecommunications, pg. 1, lines 5-6].

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

From here on, Nevo, et al, shall be referred to as Nevo and Leprieur, et al, shall be referred to as Leprieur.

5. Claims 4-6, 12, and 18-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nevo, in view of Leprieur (U.S. Patent No. 6,959,201).

Regarding claim 4, Nevo teaches the limitations according to claim 2. Nevo fails to teach registering counter values from a first and second counter provided in the first and the second radio access means, respectively, in response to the CTE. Leprieur

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teaches using a mobile communications device with two types of radio access technologies that performs handover, further comprising registering counter values from a 1st and 2nd counter provided in the 1st and 2nd radio access technology in response to a common time event. [The common time event is an interruption of transmission by the 1st radio access technology so the handover may be performed. The time shift between the 2 mobile radio modes, which is an interruption in the transmission of 1st radio access technology, is calculated in response to the interruption. Counters that are part of clocks associated with the 1st and 2nd radio modes assist in calculating this time shift. A 1st mobile radio mode M1 associated with UTRAN technology has a 1st counter SFN and a 2nd mobile radio terminal M2 has a 2nd counter T1, T2, etc. pg. 2, paragraph 35]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Nevo to include registering counter values in response to the common time event for the purpose of assisting with the handover process.

Regarding claim 5, Nevo in view of Leprieur teach the limitations of claim 4. Leprieur further teaches a current connection frame number, current slot and current chip as being registered by a first radio access means in response to the CTE. A frame number corresponds to the 1st mobile radio mode and is detected as part of the time shift calculation process. Timeslot counters and chip counters are found in the 1st radio mode. [pg. 2, paragraphs 19 and 35]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Nevo to include

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registering a frame number, slot and chip by a 1st radio access means in response to the common time event for the purpose of synchronizing the 1st and 2nd radio access means in order to assist with the handover process.

Regarding claim 6, Nevo in view of Leprieur teach the limitations of claim 4. Leprieur further teaches the current frame number in a GSM multiframe structure and the position within the frame as being registered by the second radio access means in response to the CTE. A frame number corresponds to the 2nd mobile radio mode and is detected as part of the time shift calculation process. [pg. 2, paragraph 21]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Nevo to register the frame number of the 2nd radio access means in response to the common time event for the purpose of synchronizing the 1st and 2nd radio access means in order to assist with the handover process.

Regarding claim 12, Nevo teaches the limitations of claim 1. Nevo does not teach registering counter values from a first and second counter provided in the first and the second radio access means respectively in response to the CTE. Leprieur teaches using a mobile communications device with two types of radio access technologies that performs handover, further comprising registering counter values from a 1st and 2nd counter provided in the 1st and 2nd radio access technology in response to a common time event. The common time event is an interruption of transmission by the 1st radio

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access technology so the handover may be performed. The time shift between the 2 mobile radio modes, which is an interruption in the transmission of 1st radio access technology, is calculated in response to the interruption. Counters that are part of clocks associated with the 1st and 2nd radio modes assist in calculating this time shift. A 1st mobile radio mode M1 associated with UTRAN technology has a 1st counter SFN and a 2nd mobile radio terminal M2 has a 2nd counter T1, T2, etc. [pg. 1, paragraphs 13-23 and pg. 2, paragraph 35]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Nevo to register counter values from a first and second counter provided in the first and the second radio access means respectively in response to the CTE for the purpose of synchronizing the 1st and 2nd radio access means in order to assist with the handover process.

Also regarding claim 12, Nevo does not teach a delay between channel timing and the counter of the first radio access means is taken into account when determining the activation time of the time schedule. Leprieur teaches a time shift must be calculated using a counter located in the 1st radio mode. [pgs. 1, paragraphs 13-23 and pg. 2, paragraph 35]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Nevo to use the delay to synchronize the clocks corresponding to the 1st and 2nd radio access means as part of the synchronization process between the 1st and 2nd radio access means.

Regarding Claim 18, Nevo teaches the limitations of claim 17. Nevo does not teach the time reference generating means comprising a first and second counter synchronize mechanism provided in the first and second radio access means, respectively, where one of the counter synchronize mechanisms is adapted to generate an interrupt and wherein the interrupt is the CTE the other counter synchronize mechanism adapted to receive the interrupt. Leprieur teaches using a mobile communications device with two types of radio access technologies that performs handover, further comprising registering counter values from a 1st and 2nd counter provided in the 1st and 2nd radio access technology in response to a common time event. The common time event is an interruption of transmission by the 1st radio access technology so the handover may be performed. The time shift between the 2 mobile radio modes, which is an interruption in the transmission of 1st radio access technology, is calculated in response to the interruption. Counters that are part of clocks associated with the 1st and 2nd radio modes assist in calculating this time shift. A 1st mobile radio mode M1 associated with UTRAN technology has a 1st counter SFN and a 2nd mobile radio terminal M2 has a 2nd counter T1, T2, etc. [pg. 1, paragraphs 13-23 and pg. 2, paragraph 35]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Nevo to register counter values from a first and second counter provided in the first and the second radio access means respectively in response to the CTE for the purpose of synchronizing the 1st and 2nd radio access means in order to assist with the handover process.

Regarding claim 19, Nevo in view of Leprieur teaches the limitations of claim 18. Leprieur further teaches either or both of the counter synchronize mechanisms are adapted to write a bit onto a connection to the other, the bit being the interrupt. Bit counters are used in the clock corresponding to the 2nd radio mode that assist in the synchronization process from the 1st radio mode to the 2nd radio mode. [pg. 2, paragraph 35]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Nevo to use a bit counter value to determine the interrupt time between the 1st and 2nd radio access means in order to assist with the handover process.

Regarding Claim 20, Nevo in view of Leprieur teach the limitations of claim 19. Leprieur further teaches the time reference generating means comprises first and second counter means and first and second counter value register means provided in the first and second radio access means, respectively. Leprieur teaches using a mobile communications device with two types of radio access technologies that performs handover, further comprising registering counter values from a 1st and 2nd counter provided in the 1st and 2nd radio access technology in response to a common time event. [The common time event is an interruption of transmission by the 1st radio access technology so the handover may be performed. The time shift between the 2 mobile radio modes, which is an interruption in the transmission of 1st radio access technology, is calculated in response to the interruption. Counters that are part of clocks associated with the 1st and 2nd radio modes assist in calculating this time shift. A 1st mobile radio mode M1 associated with UTRAN technology has a 1st counter SFN

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and a 2nd mobile radio terminal M2 has a 2nd counter T1, T2, etc. pg. 2, paragraph 35]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Nevo to include registering counter values in response to the common time event for the purpose of assisting with the handover process.

Regarding Claim 21, Nevo in view of Leprieur teach the arrangement according to claim 20. Leprieur further teaches the counter of the first radio access means, in operation, is adapted to generate current connection frame number, current slot and current chip, which the time reference generating means is adapted to store in the first counter value register means in response to the CTE. A frame number corresponds to the 1st mobile radio mode and is detected as part of the time shift calculation process. Timeslot counters and chip counters are found in the 1st radio mode. [pg. 2, paragraphs 19 and 35]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Nevo to include registering a frame number, slot and chip by a 1st radio access means in response to the common time event for the purpose of synchronizing the 1st and 2nd radio access means in order to assist with the handover process.

Regarding Claim 22, Nevo in view of Leprieur teach the arrangement according to claim 20. Leprieur further teaches the counter of the second radio access means is adapted to generate the current frame number in GSM multiframe structure and the position within the frame, which the time reference generating means is adapted to

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store in the second counter value register means in response to the CTE. A frame number corresponds to the 2nd mobile radio mode and is detected as part of the time shift calculation process. [pg. 2, paragraph 21]. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Nevo to register the frame number of the 2nd radio access means in response to the common time event for the purpose of synchronizing the 1st and 2nd radio access means in order to assist with the handover process.

6. Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Nevo.

Regarding claim 29, Nevo teaches the arrangement according to claim 16 wherein the first radio access technology is CDMA [pg. 4, lines 18 through 29]. Nevo fails to teach the arrangement according to claim 16, wherein the first radio access technology is WCDMA. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the mobile radio terminal of Nevo to use WCDMA as a first radio access technology instead of CDMA as a first radio access technology in order to reach users of the 1st and 2nd radio access means over a wider area.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 5,761,623 describes a cellular telecommunications network having seamless interoperability between exchanges while supporting operation in multiple frequency hyperbands.

US Patent No. 6,370,356 B2 describes an apparatus and method of providing a mobile communication system.

US PG Publication 2002/0098864 A1 describes mobile radio communication apparatus adaptable to a plurality of radio communication systems.

US Patent No. 7,206,601 describes a method for connecting a mobile radio communication apparatus to a plurality of radio communication systems.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to FRANK DONADO whose telephone number is (571) 270-5361. The examiner can normally be reached on Monday-Thursday, 7:30 am -5 pm, alternate Fridays, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benny Tieu can be reached on 571-272-7490. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Frank Donado
Art Unit 4173

/FD/

3/19/2008

/Taghi T. Arani/

Supervisory Patent Examiner

3/21/2008